

**REMARKS**

Claims 3 and 12 are canceled without prejudice, claims 14 to 27 are added, and therefore claims 1, 2, 4 to 11, and 13 to 27 are now pending.

Applicant respectfully requests reconsideration of the present application in view of this response.

With respect to paragraph one (1) of the Office Action, it was asserted that the Declaration was defective because it lacked an application number and filing date. This assertion is not understood since the Declaration filed with the Missing Parts Response dated May 10, 2002, was signed and since it included the application serial number and the filing date. Another copy of the previously filed Declaration accompanies this response. It is therefore respectfully requested that the objection be withdrawn, and that the Examiner acknowledge that the Declaration is satisfactory.

With respect to paragraph two (2), a certified copy of the German priority application no. 101 01 351.5 accompanies this response to perfect the priority claim. Acknowledgment is respectfully requested.

With respect to paragraph three (3), the disclosure was objected to because the text at lines 20 and 21 of page 6 referred to second and third resistances. The Office Action suggested that it appeared that they should be first and second resistances. The text is correct as shown, and it reads as follows:

*Resistances  $R_3$ ,  $R_4$ ,  $R_5$  and  $R_6$  can be combined as a **first resistance**, which has a positive temperature coefficient in the embodiment described here. For simplification, let us assume below that resistances  $R_3$ ,  $R_4$ ,  $R_5$  and  $R_6$  are the same. Resistance  $R_2$  of the solid electrolyte body in the lead wire area forms a **second resistance**, and the resistance of the measurement device, i.e., in this case the resistance of solid electrolyte body  $R_1$  in the measurement area, forms a **third resistance**. The second and third resistances have a negative temperature coefficient.*

(Specification, page 6, lines 15 to 21 (emphasis added)). Clearly, the first, second, and third resistances are separately characterized, and the first resistance has a positive temperature coefficient, whereas the second and third resistances have a negative temperature coefficient.

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It is therefore respectfully requested that the objection be withdrawn in view of the foregoing explanation.

With respect to paragraph four (4), it was asserted that the title was not descriptive. The Title has been rewritten. Approval and entry are respectfully requested.

With respect to paragraph eighteen (18), Applicant thanks the Examiner for indicating that claims 12 and 13 contain allowable subject matter, and that these claims would be allowable if rewritten as independent claims and rewritten to overcome the indefiniteness rejections. While the rejections may not be agreed with, to facilitate matters, claim 1 has been rewritten to include the features of claims 3 and 12, which have been canceled without prejudice. The dependency of claim 13 has been changed from claim 12, which has been canceled, to claim 1. It is therefore respectfully requested that the objections be withdrawn as to claims 12 and 13.

With respect to paragraph six (6), claims 1 to 13 were rejected as indefinite under the second paragraph of 35 U.S.C. § 112.

While the rejections may not be agreed with, to facilitate matters, claims 1, 5 and 8 have been rewritten to better clarify the subject matter. As further regards claim 1, it is definite because the specification does make plain to a person having ordinary skill in the art what is meant by the phrase "at least approximately constant". In this regard, the present application provides as follows:

*In the present embodiment, the setpoint temperature in measurement area 111 is approximately 800 degrees. The setpoint temperature in measurement area 111 should not have any dependence on the temperature in lead wire area 112. Resistance  $R_1$  of second solid electrolyte film 122 in measurement area 111 amounts to approximately 60 ohm. Resistance  $R_2$  of second solid electrolyte film 122 in lead wire area 112 amounts to approximately 300 ohm in the case of a hot housing and is so great when the housing is cold that the contribution to the total resistance is negligible. Resistances  $R_3$ ,  $R_4$ ,  $R_5$  and  $R_6$  of lead wires 151a, 153a are selected so that each amounts to approximately 10 ohm when the housing is cold, and each amounts to approximately 15 ohm when the housing is hot. The total resistance thus remains approximately the same regardless of whether the housing is hot or cold.*

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(Specification, page 6, line 29 to page 7, line 7 (emphasis added)). The Federal Circuit requires no more as to a person having ordinary skill in the art. In view of the foregoing, it is respectfully requested that the indefiniteness rejections be withdrawn as to the claims.

With respect to paragraph eleven (11), claims 1 to 11 were rejected under 35 U.S.C. § 102(e) as anticipated by Matsubara, U.S. Patent No. 6,348,140.

As regards the anticipation rejections of the claims, to reject a claim under 35 U.S.C. § 102(b), the Office must demonstrate that each and every claim feature is identically described or contained in a single prior art reference. (See *Scripps Clinic & Research Foundation v. Genentech, Inc.*, 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991)). As explained herein, it is respectfully submitted that the Office Action does not meet this standard, for example, as to all of the features of the claims. Still further, not only must each of the claim features be identically described, an anticipatory reference must also enable a person having ordinary skill in the art to practice the claimed subject matter. (See *Akzo, N.V. v. U.S.I.T.C.*, 1 U.S.P.Q.2d 1241, 1245 (Fed. Cir. 1986)).

As further regards the anticipation rejections, to the extent that the Office Action may be relying on the inherency doctrine, it is respectfully submitted that to rely on inherency, the Examiner must provide a “basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristics *necessarily* flows from the teachings of the applied art.” (See M.P.E.P. § 2112; emphasis in original; and see *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Int’f. 1990)). Thus, the M.P.E.P. and the case law make clear that simply because a certain result or characteristic may occur in the prior art does not establish the inherency of that result or characteristic.

While the rejections may not be agreed with, to facilitate matters, the features of claims 3 and 12 have been included in claim 1 as presented, and claims 3 and 12 have been canceled without prejudice. Accordingly, claim 1 is allowable, as are its dependent claims 2, and 4 to 11 and 13. The dependencies of claims 4, 6, 8 and 10 have been changed from that of canceled claim 3 to that of claim 1, and the dependency of claim 13 has been changed to claim 1 from that of canceled claim 12. It is therefore respectfully requested that the rejections of claims 1 to 11 be withdrawn.

New claims 14 to 27 do not add any new matter and are supported in the specification.

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As explained above, while the rejections may not be agreed with, new claim 14 reflects original claim 1 and also provides that “with rising temperature in the lead wire area, a reduction in the second resistance is offset by an increase in the first resistance resulting from the temperature increase in the lead wire area.”, which is simply not identically described (or even suggested) by the “Matsubara” reference, so that claim 14 is allowable. This feature is supported at lines 23 to 27 of page 6 of the present application.

In contrast, the “Matsubara” reference refers to a sensor having an inner electrode 23a having a lead wire (metallic wire) 23c and another electrode 23b having a lead wire 23d. The total resistance formed by the electrodes 23a, 23b and the lead wires 23c, 23d as well as by the solid electrolytes positioned between the electrodes is referred to as  $R_{pvs}$ . The resistance along the lead wires is referred to as  $R_{lead}$ . The “Matsubara” reference proposes to reduce the resistance  $R_{lead}$  so as to reduce the influence of temperature changes on the total resistance and hence on the measurement signal (col. 5, line 67 to col. 6, line 3), and indicates that the lead wires 23c, 23d are arranged so that no current can flow between the lead wires, so that the zirconium oxide sheet between the lead wires has no influence on the total resistance  $R_{pvs}$ . Thus, the second resistance of original claim 1 would be infinite in the case of the sensor element of the “Matsubara” reference. In particular, the “Matsubara” reference leads away from the subject matter of new claim 14, since the reference explicitly states that the lead wires are to be constructed so that the resistance between the lead wires (the second resistance) can have no influence on the total resistance, so that a change in the first resistance (resistance of the lead wires) due to temperature cannot be compensated by corresponding opposite change in the second resistance.

The subject matter of claim 14 therefore allows for compensating for the change in the lead wire resistance that is an unavoidable consequence of temperature changes and that otherwise leads to a deterioration of temperature control (see “Matsubara” col. 2, lines 62 to 67), so that claim 14 is allowable.

New claims 15 to 27 depend from claim 14, and are therefore allowable for the same reasons as claim 14. These new claims are essentially to the features of original claims 2 to 13 and as presented.

Accordingly, claims 1, 2, 4 to 11, and 13 to 27 are allowable.

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**CONCLUSION**

In view of the foregoing, it is believed that the objections and rejections have been obviated, and that claims 1, 2, 4 to 11, and 13 to 27 are allowable. It is therefore respectfully requested that the objections and rejections be withdrawn, and that the present application issue as early as possible.

Respectfully submitted,  
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